Farmers’ perceptions on the pineapple mealybug \([Dysmicoccus brevipes\) (Cockerell) (Homoptera: Pseudococcidae)] and control methods in Benin

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ABSTRACT

Objectives: This study aimed at evaluating the perceptions of farmers on the pineapple mealybug, the different control methods adopted against the pest and the socio-cultural factors that influence these perceptions.

Methodology and Results: A survey was conducted among 180 pineapple producers using a semi-structured questionnaire in five main pineapple production areas in Benin. Binomial regression and Factorial Correspondence Analysis (FCA) were performed to determine the sociocultural factors that influence farmers’ knowledge on the pineapple mealybug. Fifty eight percent of farmers perceived mealybug as pineapple insect pest while 22.22% reported the insect as the MWP disease vector. Experience in Pineapple production and participation in training determined the knowledge of farmers on the mealybug as important pineapple insect pest and MWP disease vectors. Only trained farmers used to apply control methods.

Conclusions and application of findings: This study shows that it is the trained producers who have a better knowledge of the mealybug and adopt some control methods. It is therefore an emergency that training seminars be organized for a large number of producers followed by supervision in sight of making them qualified to better control the proliferation of mealybug and limit the spread of wilt disease.

Key words: Farmers' perceptions, pineapple mealybug, control methods, Benin